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March 8, 2004

68231 U.S. PRO
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The Commissioner of Patents and Trademarks

*Has received an application for a patent
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US005472018A

United States Patent [19]

Verner et al.

[11] **Patent Number:** 5,472,018[45] **Date of Patent:** Dec. 5, 1995[54] **AIR CONDITIONING OF A WEAVING MACHINE WITH DISPLACEMENT TYPE AIR FLOW STREAM**[75] Inventors: **Pavel Verner, Zurich; Walter Bollier, Adliswil, both of Switzerland**[73] Assignee: **Luwa AG, Zurich, Switzerland**[21] Appl. No.: **50,432**[22] PCT Filed: **Sep. 22, 1992**[86] PCT No.: **PCT/CH92/00193**§ 371 Date: **Aug. 18, 1993**§ 102(e) Date: **Aug. 18, 1993**[87] PCT Pub. No.: **WO93/06281**PCT Pub. Date: **Apr. 1, 1993**[30] **Foreign Application Priority Data**

Sep. 23, 1991 [CH] Switzerland 02815/91

[51] Int. Cl.⁶ **D03J 1/00**[52] U.S. Cl. **139/1 C; 57/308; 19/66 CC; 15/301; 165/47; 34/435**[58] Field of Search **454/187; 138/1 C; 57/308; 19/66 R, 66 CC; 15/301; 165/47, 53; '62/63, 322, 426; 34/20, 13, 154, 435**[56] **References Cited****U.S. PATENT DOCUMENTS**

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[57]

ABSTRACT

A process for the air conditioning of a weaving machine includes generating, for the weaving machine, at least one conditioning air stream spaced from a warp of the weaving machine and directed towards the warp, and distributing the conditioning air stream in stages so as to form a downwardly directed displacement-type flow towards threads of the warp. The displacement-type flow is a non-turbulent, uniform flow over a cross-sectional profile of the flow.

19 Claims, 2 Drawing Sheets